

AMENDMENTS TO THE CLAIMS

Claims 1-3. (Canceled)

4. (Currently amended) A method of estimating the position of the AC or PC landmarks which includes:

- (a) using a midsagittal radiological image to estimate the position of the AC or PC landmarks in the midsagittal plane;
- (b) using the estimated position of the AC or PC landmarks to generate ~~one or more axial or coronal~~ ~~a plurality of radiological images relating to different slices~~, including ~~at least one a first image of a slice~~ including the estimated position of the AC or PC landmark ~~and second images of neighboring slices~~; and
- (c) analysing the ~~axial or coronal~~ radiological image[[s]] ~~slices~~ to improve the estimate of the position of the AC or PC landmarks.

5. (Previously presented) A method according to claim 4 in which the images are axial images, and step (c) includes deriving a mean ventricular line (MVL), and determining the position of the AC or PC landmarks by scanning intensity values along the MVL.

6. (Currently amended) A method according to claim 5 in which ~~there are a plurality of the images are axial images~~ relating to different axial slices including a first axial image of an axial slice containing the estimates of the position of the AC or PC landmarks, and second images of neighbouring axial slices, the method further including the steps of determining dimensions of the AC or PC landmarks using the second images.

7. (Previously presented) A method according to claim 4 in which the images are coronal images, and step (c) includes deriving a symmetry line within a first coronal image including estimates of the position of the AC or PC landmarks, and determining the position of the landmark by scanning intensity values along the symmetry line.

8. (Currently amended) A method according to claim 7 in which ~~there are a plurality of the images are coronal images~~ relating to different coronal slices including second images of coronal slices neighbouring the first coronal slice, the method further including the step of determining dimensions of the AC or PC landmarks using the second images.
9. (Previously presented) A method according to claim 4 in which the landmark is the AC.
10. (Previously presented) A method according to claim 4 in which the landmark is the PC.
11. (Previously presented) A method according to claim 4 in which step (a) is performed by a method of estimating the position of a brain landmark which includes:
 - (i) defining at least one initial threshold value;
 - (ii) determining whether a region of a midsagittal radiological image including a brain structure includes a group of pixels having intensity values in a range defined by the initial threshold value and which obey one or more predefined geometrical criteria describing the structure;
 - (iii) if not, then at least once modifying the threshold value and performing step (ii) again;
 - (iv) if so, identifying the group of identified pixels as the structure; and
 - (v) generating a first estimate of the position of the landmark as a point on the identified structure wherein the structure is the fornix, and the landmark is the anterior commissure (AC).
12. (Previously presented) A computing apparatus including a processor and a computer-readable medium including program instructions which are readable by a computer and cause the computer to perform a method as defined by claim 4.
13. (Previously presented) A computer program product on a computer-readable medium, the computer program product including program instructions which are

readable by a computer and cause the computer to perform a method as defined by
claim 4.